

USDA-SCS
Section II-E
Technical Guide
Area 2, Texas

VERY SHALLOW
RANGE SITE DESCRIPTION
PE-28-33

Land Resource Area HP RR
Location _____
Date _____
Approved by _____

1. PHYSIOGRAPHIC FEATURES: This site consist of gently sloping to moderately steep low hills and ridges. Rock outcrops, stones, or exposed caliche comprises 25 to 50 percent of some areas. Slopes range from 2 to 20 percent. Elevation varies from about 2500 feet in Briscoe County to 4500 feet in Dallam County.

2. SOILS:

a. These are very shallow, well drained, calcareous loamy soils. Typically they have a thin gravelly loam surface layer over bedrock or caliche. Because of their shallow depth, they have low water holding capacity and a restricted root zone. The natural fertility is low.

b. Major soils associated with this site:

Potter gr. L, Plack L, Kimbrough L, Latom fsL.

c. Specific site location:

APPROVAL SIGNATURE

DATE

Brent J. Conlan
Area Conservationist

2/23/79

Joe Morris
Field Specialist-Range

3/13/79

Gary Valentine
Field Specialist-Biology

3/16/79

3. CLIMATE:

See field office climate description.

4. CLIMAX VEGETATION:

- a. The climax plant community is made up of mid-grasses with lesser amounts of tall and short grasses. Tall grasses are found in the more favored moisture areas. Soil depth limits vegetative density. Areas of bare ground are quite common.

Relative Percentage of Total Plant Community (Air Dry Weight).

<u>Grasses 85%</u>	<u>Woody Plant 10%</u>	<u>Forbs 5%</u>
sideoats grama 25	mountain mahogany)	dotted gayfeather)
little bluestem] 20	black & feather dalea)	bush morningglory)
blue grama)	yucca)5	stemless actenia)
sand bluestem)	catclaw acacia)	bigtop dalea)
Indiangrass)	skunkbush sumac)	black sampson)
switchgrass)	plains grease-bush)	trailing ratany)
hairy grama)		longleaf wildbuckwheat)
perennial threeawn) 40		plains blackfoot)
rough tridens)		catclaw sensitivebriar)
silver bluestem)		
sand dropseed)		
Malls panic T		
Fall witchgrass T		
needle-and thread T		

- b. If retrogression is cattle induced Indiangrass, sand bluestem, switchgrass, little bluestem and the more palatable forbs decrease. Hairy grama, silver bluestem, stemless actenia and woody plants are the principal increasers.

If the plant community continues to degenerate, perennial threeawns, sand dropseed, juniper, and mesquite will increase.

- c. Approximate total annual production of this site in excellent condition ranges from 400 pounds to 850 pounds of air-dry vegetation per acre depending on rainfall and growing conditions.

5. WILDLIFE ADAPTED TO THE SITE: This site is inhabited by mule deer, aoudad sheep, turkey, quail and dove. Predator animals such as coyote and bobcat also inhabit the site. Other small animals and birds feed, nest and raise their young on the site.

6. ESTHETIC AND RELATED VALUES: Colorful blue, white, purple and lavender flowers of forbs dot the landscape during the Spring and early Fall when moisture is adequate. Lavender flowers of the Catclaw, black and feather dalea along with white flowers of the yucca also help to make this a colorful site in the Spring. Both dotted gayfeather and yucca are used for landscaping.

7. HYDROLOGIC CHARACTERISTICS: These soils have moderate water infiltration rates and moderately slow to very slow transmission rates. Runoff is medium to very rapid and sediment potential is moderate to high. Ground water recharge is insignificant. The gravelly soils in this site are not subject to significant soil blowing. Those in wind erodibility groups 3 and 4L have moderate susceptibility.

8. GUIDE TO INITIAL STOCKING RATE:

Percent

a. Condition Class	Climax Vegetation	Acres/A.U./Yearlong
Excellent	76-100	16-22
Good	51-75	20-30
Fair	26-50	20-42
Poor	0-25	40+

RELATIVE FORAGE QUALITY OF SPECIES 1/

a. For cattle:

Primary 2/	Secondary 3/	Low Value 4/
Indiangrass	silver bluestem	hairy grama
switchgrass	sand dropseed	threesawns
sand bluestem	Fall witchgrass	daleas
sideoats grama	tumble windmill	dotted gayfeather
blue grama	wild alfalfa	yucca
little bluestem	prairie clovers	catclaw acacia
blue grama	Malls panicum	skunkbush sumac
needle-and-thread	slim tridens	sand muhly
yucca blooms	rough tridens	juniper
catclaw sensitivebriar	bush morningglory	prickly pear
		mountain mahogany
		trailing ratany
		black sampson
		stemless actenia
		plains blackfoot
		longleaf wildbuckwheat

b. For mule deer and aoudad sheep:

prairie clovers	plains blackfoot	junipers
wild alfalfa	bush morningglory	yucca
yucca blooms	dotted gayfeather	bluestems
penstemons	catclaw acacia	hairy grama
catclaw sensitivebriar	dalea	tumble windmill
trailing ratany	western ragweed	stemless actenia
	longleaf wildbuckwheat	
	plains blackfoot	
	blue grama	
	sideoats grama	
	sand dropseed	

c. For turkey, dove, quail 5/

western ragweed	penstemons	fuzzy seeded
catclaw sensitivebriar	Halls panicum	grasses & forbs
broonweed	black sampson	sideoats grama
sunflower	sand dropseed	blue grama
crotons	catclaw acacia	threeawns
Fall switchgrass	Indiangrass	stemless actenia
	plains blackfoot	longleaf wildbunchwheat
	skunkbush sumac	hairy grama
		bluestems

- 1/ This rating system provides general guidance as to animal preference for plant species. It also indicates competition between kinds of animals for the various plants. Grazing preference changes from time to time and place to place depending upon the animal, plant palatability and nutritive value, stage of growth and season of use, relative abundance, and associated plants. Grazing preference does not necessarily reflect the place of a plant in the range ecosystem.
- 2/ These species generally decrease under prolonged heavy grazing.
- 3/ These plants usually increase initially, then decrease under prolonged heavy use.
- 4/ These plants continue to increase with heavy grazing use.
- 5/ For these wildlife species the terms primary, secondary and low value indicate animal preference only. They do not indicate plant response to feeding pressure ~~nor do they have any ecological significance.~~

GB